

Title (en)

DOUBLE RESONATING BEAM FORCE TRANSDUCER WITH REDUCED LONGITUDINAL PUMPING

Title (de)

DOPPELRESONANZBALKENKRAFTWANDLER MIT VERRINGERTEM LONGITUDINALEM PUMPEN

Title (fr)

TRANSDUCTEUR DE FORCE A DOUBLE FAISCEAU RESONANT AVEC POMPAGE LONGITUDINAL REDUIT

Publication

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Application

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Priority

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Abstract (en)

[origin: WO02057728A1] A resonator beam structure that, during vibration of the tines, minimizes coupling of a longitudinal motion of the tines into a support structure to which the resonator beam is attached. The resonator beam includes a pair of tines; a first base region mechanically coupling a first ends of the tines together; a second base region mechanically coupling the second ends of the tines together; a first cutout of a first predetermined geometry at a first predetermined position in a closed interior portion of the first base region; and a second cutout of a second predetermined geometry at a second predetermined position in a closed interior portion of the second base region. The invention includes a method for using finite element analysis to determine an optimum geometry and position of the cutouts.

IPC 8 full level

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